

**AMENDMENTS TO THE CLAIMS:**

Claims 1-11 were pending at the time of the Office Action.

Claims 1, 2, 5, 6, 7 and 10 are amended, claims 12-13 are new.

Claims 1-13 remain pending.

1. (Currently amended) A gear assembly adapted to be mounted on a shaft, comprising:  
a drum having an inner cylindrical wall adapted to be mounted on the shaft, an outer cylindrical wall, and a drum face connected to said inner cylindrical wall, the drum face including a plurality of cavities;  
a gear ring mounted on and fixed to an outer circumference of the drum face; and  
gear teeth formed on an outer circumference of the gear ring,  
wherein a vector normal to the gear teeth at a radial and a vector perpendicular to the inner cylindrical wall at the radial have an angular difference that is less than 30°.
2. (Currently amended) A system comprising:  
a power generation system including:  
an engine a power generation system;  
a shaft coupled to the engine power generation system; and  
a spur gear mounted to the shaft; and  
a receiving system including:  
a shaft; and  
a low angle face gear mounted to the shaft of the receiving system, wherein the low angle face gear includes a drum having an inner cylindrical wall adapted to be mounted on the receiving system shaft, and a drum face

connected to said inner cylindrical wall, the drum face having at least two cavities to reduce the weight of the low angle face gear,

wherein the power generation system shaft and the receiving system shaft are positioned such that the spur gear drives the low angle face gear, and the shafts have an angular difference that is less than 30°.

3. (Original) The system of Claim 2, wherein the power generation system includes an engine.

4. (Original) The system of Claim 2, wherein the receiving system is a transmission.

5. (Currently amended) The system of Claim 4, wherein the transmission includes a rotary aircraft engine transmission.

6. (Currently amended) The system of Claim 1 Claim 2, wherein the low angle face gear comprises:

a drum having an inner cylindrical wall adapted to be mounted on the receiving system shaft, and a drum face connected to said inner cylindrical wall;

a gear ring mounted on and fixed to the drum face; and

gear teeth formed on an outer circumference of the gear ring,

wherein a vector normal to the gear teeth at a radial and a vector perpendicular to the inner cylindrical wall at the radial have an angular difference that is less than 30°.

7. (Currently amended) A system comprising:

a first system including:

a shaft; and

a spur gear mounted to the shaft; and

a second system including:

a shaft; and

a low angle face gear mounted to the shaft of the receiving system, wherein the low angle face gear includes a shaft aperture at least partially encircled by a plurality of apertures, the shaft aperture to receive the second system shaft and the plurality of apertures to reduce the weight of the low angle face gear,

wherein the first system shaft and the second system shaft are positioned such that the spur gear drives the low angle face gear, and the shafts have an angular difference that is less than 30°.

8. (Original) The system of Claim 7, wherein the second system includes an engine.

9. (Original) The system of Claim 7, wherein the first system is a transmission.

10. (Currently amended) The system of Claim 9, wherein the transmission includes a rotary aircraft engine transmission.

11. (Original) The system of Claim 7, wherein the low angle face gear comprises:  
a drum having an inner cylindrical wall adapted to be mounted on the receiving system shaft, and a drum face connected to said inner cylindrical wall;  
a gear ring mounted on and fixed to the drum face; and  
gear teeth formed on an outer circumference of the gear ring,  
wherein a vector normal to the gear teeth at a radial and a vector perpendicular to the inner cylindrical wall at the radial have an angular difference that is less than 30°.

12. (New) The gear assembly of claim 1, wherein the plurality of cavities are generally circular cavities.

13. (New) The gear assembly of claim 1, wherein the plurality of cavities are substantially symmetrically arranged between the inner cylindrical wall and the outer cylindrical wall.

60483

CUSTOMER NUMBER

- 5 -

BOI-0166US  
Disc. No. 02-1166